Summer Fire Safety Campaign Kit - 2004

For Albertans, summer fun means vacations, barbeques, weekends at the lake, picnics, and camping. However, the hotter temperatures and dryer conditions, mixed with an increase in fire-related activities, means that summer is also a time of high fire risks. This kit provides information on summer fire hazards and includes fire safety tips to help you and your family, friends, and co-workers enjoy the summer season without getting burned.

Alberta's fire statistics show that from May 1 to September 1, during the five-year period between 1998 and 2002, there were:

- 11,900 fires;
- 55 deaths;
- 615 injuries; and
- $348 million in property losses.

Thirty per cent of fire deaths and 52 per cent of fire injuries during this period occurred outdoors. With the remaining 70 per cent of fire deaths and 48 per cent of fire injuries occurring in the home, Albertans must continue to practice fire prevention and safety inside their homes, as well as being aware of the additional fire hazards that summer brings.

The statistics below identify the common property classes involved in summer fires, as well as the major causes of these fires.

Top Five Property Classes Involved in Summer Fires

Ground transport vehicles – 26%
- Includes cars, trucks, etc.

Outdoor property – 17%
- Includes brush, grass, trees, fences, etc.

Homes – 16%
- Includes one/two family dwellings, apartments, mobile homes, etc.

Farm facilities – 5%
- Includes straw stacks, silos, poultry/livestock production facilities, etc.

Special vehicles – 4%
- Includes construction equipment, cranes, snowmobiles, emergency vehicles, etc.

Major Causes of Summer Fires Within Each Property Class

Ground transport vehicles:
- Mechanical/electrical failure or malfunction – 39%
- Arson or set fires – 14%
- Exposure fires – 13%*

Outdoor property:
- Arson or set fires – 42%
- Smoker's materials and open flames – 18%
- Exposure fires – 17%

Homes:
- Cooking – 26%
- Smoking – 13%
- Arson or set fires – 12%

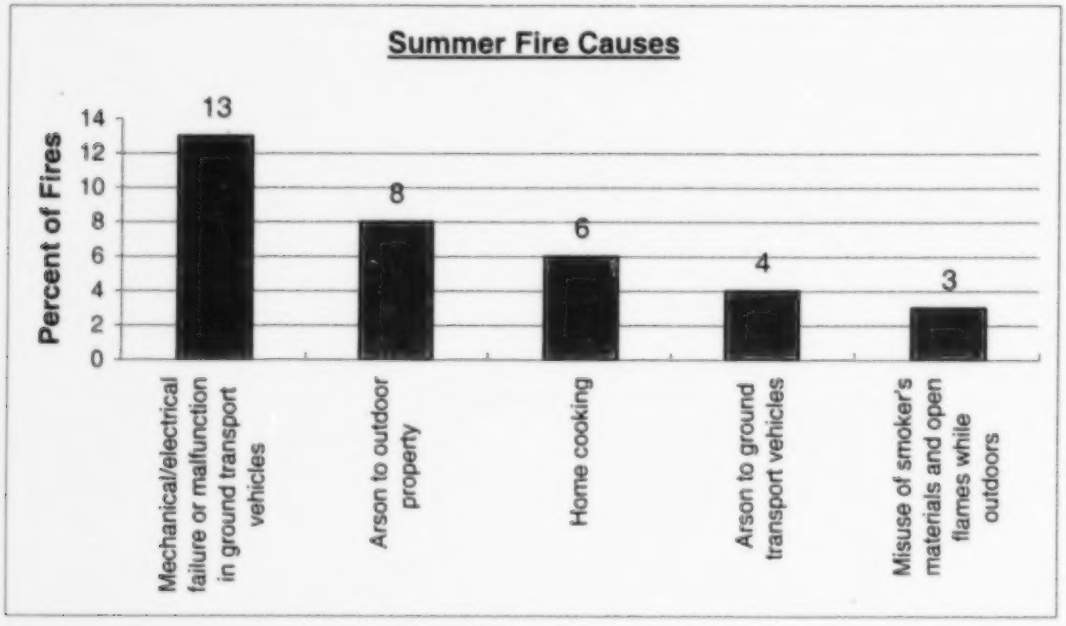
Farm Facilities:
- Exposure fires – 43%
- Smoker's materials and open flames – 13%
- Arson or set fires – 9%

*Exposure fires are fires that spread from one property to another

Special vehicles:

- Mechanical/electrical failure or malfunction of an ignition source – 25%
- Mechanical/electrical failure or malfunction of electrical equipment – 20%
- Human failing – 8%
- Exposure fires – 15%

The following chart identifies the top five summer fire causes across all property classes.



In addition to the summer fire causes identified above, there are many other fire hazards associated with summer activities. The pages that follow identify these summer activities and provide safety tips to help you enjoy a safe summer season. Albertans are also encouraged to follow fire prevention and safety practices in the home all year round, including the installation and maintenance of smoke alarms and developing and practicing fire escape plans.

Barbecue Safety

In Alberta, during the five-year period from 1998–2002, there were 141 barbecue related fires, which caused six injuries and $23,647 in property damages. The most common cause of barbeque-related fires is mechanical wear or failure, including breaks or leaks.

Gas barbecues use propane or natural gas. When mixed with air, these fuels can explode and cause dangerous fires. Propane has been identified as the cause in 95 per cent of barbeque-related fires.

Solid fuel-fired barbeques use wood, chemicals in cake form, or charcoal briquettes, which take longer to heat up and ignite than gas fuel sources and contain hot coals. These barbecues become dangerous when individuals use accelerants, such as gasoline, to speed up the ignition process, or when hot coals are unsafely disposed of, causing re-ignition.

General Barbecue Safety Tips

- When purchasing a barbecue, select one that is certified and labeled by a recognized testing agency, such as the Canadian Standards Association (CSA), or Underwriter's Laboratories (UL/ULC).
- Make cleaning, maintenance and regular safety inspections part of your summer barbecuing routine. Follow manufacturer's instructions and if needed, have appliances inspected or repaired by a trained professional.
- Keep barbecues away from anything that can burn, such as your home, car, dry vegetation, deck rails, wood balconies, twigs, paper cups and plates, etc.
- Trim the limbs of trees near the barbeque to prevent setting a fire from a flare-up of fuel or grease.
- Use long-handled barbecue tongs and brushes to put extra distance between yourself and the heat of the barbecue.
- Keep children away from the barbecue.
- Always have a fire extinguisher, baking soda, and water available to put out an accidental fire.
- Wear fitted clothing near a barbecue as flames can easily ignite loose clothing. When barbecuing, wear a heavy apron and an oven mitt that fits high up over your forearm.
- Don't barbeque indoors (garages, sheds, etc.). When used in an enclosed area, a toxic and fatal build-up of carbon monoxide can occur.
- After barbecuing, make sure the gas supply is turned off and the flames are out. Close the lid to prevent unwanted re-ignition.
- If you get burned, run cool water over the burn for 10 to 15 minutes. **DO NOT** use butter or salve on burns — these products seal in heat and can cause further damage to the tissue. If you receive a serious burn, with charred skin, for example, seek medical attention immediately.

Gas Barbecues

- Never smoke while using flammable gases.
- Every time you use your barbecue, watch for wear or damage; inspect and maintain all gas cylinders, supply hoses, connections, burners and tubes. If damage or wear exists, replace the worn or damaged part immediately, or call a trained professional for the required repairs.
- Follow the manufacturer's instructions when fitting the gas supply to the barbecue. Use proper wrenches to tighten connections.
- If your barbecue connection area has an "O" ring, check it every time you connect the cylinder. Replace missing, cracked or damaged "O" rings.
- After connecting the gas supply hose to the barbecue, open the propane cylinder or natural gas supply valve. Check for gas leaks by applying a soapy solution over the connections and hose. Soap bubbles will form if there is a leak. If a leak or fire occurs, turn off the gas supply valve.
- Always light a gas barbeque with the lid up. Gas trapped inside can easily ignite and cause the lid to flip open or the unit to explode.
- If using a match to light the barbeque, always light the match before turning on the gas. If the barbecue is equipped with an igniter, follow the directions on the control panel. To prevent excessive gas build-up, light the barbecue as soon as the gas flow is turned on. If the barbecue doesn't light or goes out, turn off the valves, leave the lid open and wait five minutes before trying again.
- Ensure that the gas supply to the barbecue is either fully open or fully closed.
- Make certain that the gas supply to the barbecue is turned off when the barbecue is not in use.
- Prevent grease from dripping onto hoses or connections, as grease build-up is a potential fire hazard.
- Store extra propane cylinders away from your barbecue. Excess heat may overpressure the cylinder and cause it to release propane from the cylinder relief valve.
- Check the flame on your gas barbecue regularly. Appliances that use natural gas should show a blue flame with yellow tips. If the flame is mostly yellow, this is a sign that the fuel isn't completely burning and may be producing carbon monoxide.
- If you suspect a leak, shut off the gas supply and if safe to do so, remove any sources of ignition. Alert others and leave the area immediately. Call the fire department from a neighbour's house.

Solid Fuel Barbecues

- Ensure that only recommended fire starters are used for barbecues. Accelerants such as gasoline can explode, and should never be used.
- Store the remaining fire starter fluid in a safe place away from the grill to prevent it from catching fire or exploding.
- Do not add starter fluid to the fire after it has started. A vapour trail leading back to the container can cause explosion and injury.
- Be sure that fire starter fluids are not accessible to children as they are poisonous when swallowed. Childproof caps are available at your local dealer. Solid fuel fire starters or electric fire starters are also available.
- Before disposing of the ashes, ensure they are thoroughly extinguished. Live coals or hot embers can start a fire – be extremely cautious!

Flammable Gases: Propane and Natural Gas

Flammable gases, such as propane and natural gas, are commonly used in the summer months to fuel household appliances and outdoor equipment such as barbeques, portable heaters, and appliances in recreational vehicles (RV). When used with care, flammable gas is a safe and convenient fuel, but it can create a hazardous situation in an enclosed space.

When ignited in an enclosed area with limited ventilation, a potentially fatal build-up of carbon monoxide will occur. A gas leak or a build-up of gas can lead to an explosion when the gas-air mixture comes in contact with a spark or open flame. Make sure each gas appliance is safe before using it.

Flammable Gas Safety Tips

- When purchasing flammable gas containers/cylinders and/or appliances ensure they are certified and labelled by a recognized testing agency, such as the Canadian Standards Association (CSA), or Underwriter's Laboratories (UL/ULC).
- Follow the manufacturer's instructions for using and fitting appliances to the gas supply. This will help limit the possibility of leaks.
- Only use flammable gases and equipment for its intended purpose.
- Make cleaning, maintenance and regular safety inspections of flammable gas containers/cylinders and/or appliances part of your routine. Follow manufacturer's instructions and where required, have containers and appliances inspected or repaired by a trained professional.
- When using gas appliances, keep them away from anything that can burn, such as items in and around your home, including dry vegetation, deck rails, wood balconies, twigs, and items in or around vehicles.
- Use and store flammable gases outdoors where possible to ensure ventilation.
- When using flammable gases inside homes, campers, tents, sheds, vehicles or any inside area, ensure that the area is well ventilated to prevent the accumulation of dangerous gases.
- Only store enough flammable gases for your immediate purposes.
- When handling and storing flammable gases and gas appliances, keep them well away from heat sources or flames, such as lit cigarettes.
- To check for flammable gas leaks, brush a soap and water solution over the suspected area — bubbles will form if there is a leak.
- Check the flame on your flammable gas appliance regularly. Appliances that use flammable gas should mostly show a blue flame with yellow tips. If the flame is mostly yellow, this is a sign that the fuel isn't burning completely and may be producing carbon monoxide.

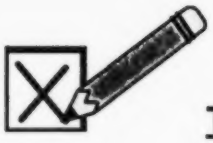
- Exposure to flammable gases can result in nausea and headaches. If either of these symptoms develop, get outside immediately and breathe fresh air. Under extreme conditions, exposure to flammable gases can result in death.
- Always have a fire extinguisher, baking soda, and water available to put out an accidental fire.
- If you suspect a leak, leave the area immediately, shut off the gas supply if possible and remove any possible sources of ignition. Call the fire department from a neighbour's home.

Propane Cylinders

- Propane cylinders must be inspected and recertified every 10 years. Re-certification of the tank must be completed by a qualified professional and can usually be arranged through most propane filling stations.
- Only a certified person may fill a propane cylinder. Ensure they only fill the cylinder to 80 per cent of its capacity. Propane needs room to expand.
- Do not attempt to fill or use a propane cylinder that is damaged or corroded. Damaged cylinders must be given to a propane dealer for disposal.
- When transporting or storing a propane cylinder, secure it in an upright position with a safety plug (a POL plug) in place and keep the transport area well ventilated to prevent gas build up. A POL plug will prevent gas leakage when the valve is accidentally turned on, and is available through your local dealer.
- Store propane cylinders outdoors, preferably in a locked, detached shed or shaded area. Excess heat may overpressure the cylinder and cause it to release propane from the cylinder relief valve.

Natural Gas

- Keep all flue vents and chimneys free of debris and other blockages; these pathways are needed to exhaust the toxic gases from the combustion source.
- Ensure fans for ventilation are on, operational, and secure at all times.
- Maintain and clean vent pipes. Clean blocked pipes and repair any rusted or deteriorated pipes.
- Have a qualified technician install, inspect, and repair your natural gas equipment and appliances.



Test Yourself: Gas Barbecue Basics

Check or circle the correct answer.

1. When is it safe to use a propane barbecue in a garage?
a) If it is too rainy or cold to stay outdoors for long.
b) On the condition that you do not leave it unattended.
c) If it is the location most convenient to the eating area.
d) Never.

2. How do you test for leaks?
a) Brush leak detector solution onto connections and valves. Rising bubbles indicate a leak.
b) Use a match or lighter. A flame indicates there is a leak.
c) Smell the apparatus. A distinct odor like rotten eggs or boiling cabbage indicates a leak.
d) Use any of the above methods.

3. What maintenance is necessary before using a barbecue for the first time in the spring?
a) Thoroughly inspect, clean and repair it.
b) Replace worn or rusted parts.
c) Check all cylinder connections for leaks.
d) All of the above.

4. When lighting your barbecue, which of the following actions come last?
a) Turn on the burner.
b) Open the lid.
c) Use the igniter switch.
d) Use the service valve on the propane cylinder to turn on the gas supply.

5. Where should you store cylinders when they are not in use?
a) In an enclosed space, such as a garage or shed, which you can lock.
b) Outdoors away from sources of ignition, in a well-ventilated area.
c) Under or near the gas grill where they are convenient.
d) Any of the above locations would be safe.

Answers to Gas Barbecue Basics

1. d. Only use your gas barbecue outdoors in an open, well-ventilated area, at least three meters (10 feet) away from windows or doors, far from combustibles or anything that might obstruct the flow of air around the grill. It is never safe to leave a barbecue unattended, no matter where it is located.

2. a. Use a commercial leak detector solution or a mixture of 50 per cent liquid soap and 50 per cent water. Repair all leaks before using the grill. *Never use matches or lighters to check for leaks!*

3. d. As with all such equipment, make sure your barbecue is clean, in good repair and properly adjusted. If the fittings, flex hose or burners are worn or rusted, replace them. Replace any missing or worn "O" rings. Use a flexible brush (made for the purpose) to clean the tubes between the gas valve and the burner.

4. c. With the lid open, turn the cylinder service valve on. Next, turn on the burner. Only then use the igniter switch.

5. b. Store cylinders outdoors away from sources of ignition, in a secure, well-ventilated area, and always in an upright, vertical position. Never bring cylinders indoors or into an enclosed space, or keep them where they could be exposed to high temperatures.

(Adapted from the Canada Safety Council website: www.safety-council.org/quiz/barbecueq.html)

Fireworks Safety

Fireworks are designed to burn and explode and can cause serious injuries such as burns, lacerations, amputations, and blindness. Even seemingly harmless sparklers can cause dangerous injuries. Sparklers can burn as hot as 1,200 degrees Fahrenheit.

Fireworks Safety Tips

- The safest way to enjoy fireworks is to attend an outdoor public display put on by professionals.
- While attending publicly sponsored fireworks displays, keep your distance. If you're close enough to see what they are doing, you're close enough to be injured if they make a mistake.
- If you decide to buy and use your own fireworks, purchase your fireworks from a reliable source and follow the manufacturer's instructions. Never experiment or make your own fireworks. Stay away from illegal explosives.
- Keep a bucket of water nearby for emergencies.
- Never allow young children to play with fireworks.

Sparklers

- Use sparklers outdoors under adult supervision — on a driveway, sidewalk, or other fire-resistant surface away from combustible items.
- Do not use sparklers in a high wind.
- Deposit used sparklers immediately into a metal container; otherwise they may be stepped on while hot or lost in the grass only to be found at the next lawn mowing.

Gasoline Safety

Gasoline produces invisible vapors that are highly flammable. These vapors can spread considerable distances along the ground and can be ignited by a distant heat, spark, or flame. Gasoline vapors can ignite even at cold temperatures. These vapors ignite with explosive force. The flames from the vapor often travel back to the container of gasoline and create a further explosion. This can result in serious or extreme injuries, or even death. Gasoline can also self ignite at high temperatures, not necessarily requiring a spark or flame. Do not risk your life, or the life of your family, by using or storing gasoline improperly.

Gasoline Safety Tips

- Store gasoline outside the home in a ventilated area, preferably in a locked, detached shed. Don't store gasoline in the trunk of your car.
- Store gasoline in an approved container that is certified and labeled by a recognized testing agency, such as the Canadian Standards Association (CSA), or Underwriter's Laboratories (UL/ULC). These containers are vapour-proof, with flame arresters and pressure release valves or spring closing lids with spout covers. Ensure containers are tightly capped and non-breakable. Do not store gasoline in glass containers. Metal containers are best, but approved plastic containers are also available.
- Store just enough gasoline to power your gasoline-fueled equipment.
- Keep gasoline out of reach of children.
- Make sure gasoline and all flammable liquids are well away from any heat source or flame. Never smoke around gasoline.
- Use gasoline as a motor fuel only — never as a stain remover or for other purposes.
- To transport gasoline in an automobile to and from the filling station, place a sealed approved container in the trunk with the trunk lid propped open and drive directly to the fueling site. Take a direct route back home, and never store gasoline in a vehicle.
- When fuelling gasoline-powered equipment, fuel outdoors in a well-ventilated area away from combustibles.
- Before starting the motor of your gas-powered equipment, move the equipment at least three metres away from the fuelling spot. This prevents vapours from igniting.
- Never refuel your gasoline-powered equipment (i.e. lawn mower) when the engine is running. Cool the motor before refuelling.
- Be careful not to spill gasoline and immediately wipe it up if a spill occurs.
- Have a Type B fire extinguisher immediately available in case of fire. Follow the manufacturer's operating instructions.

Chimenea Safety

Chimeneas are a Mexican style, free standing, portable outdoor fireplace that may be constructed of either metal or clay materials. These portable outdoor fireplaces are imported from Mexico and are being distributed through a variety of venues. The safety of these fireplaces has not been evaluated in Canada; therefore all buyers should be aware of the potential hazards of open-air fires.

Chimenea Safety Tips

- Do not use flammable liquids such as gasoline or lighter fluid to kindle a fire.
- Do not use Chimeneas on or near a wooden deck, fence or combustible vegetation.
- Keep Chimeneas away from anything that can burn, such as your home, car, dry vegetation, tree branches and leaves, deck rails, wood balconies, twigs, paper cups and plates, etc.
- Keep children and pets away from hot chimeneyas.
- Check the Chimenea for cracks or wear and tear that may cause the fireplace to collapse.
- Follow instructions provided with the units.
- Clean, maintain, and inspect your Chimenea. Follow manufacturer's instructions and if needed, have it inspected or repaired by a trained professional.
- Always have a fire extinguisher, baking soda, and water available to put out an accidental fire.
- A Chimenea is for outdoor use. If used in an enclosed, unventilated area, a potentially fatal build-up of carbon monoxide is produced.
- After use, ensure the flames are completely out.
- If you get burned, run cool water over the burn for 10 to 15 minutes. **DO NOT** use butter or salve on burns — these products seal in heat and can cause further damage to the tissue. If you receive a serious burn, with charred skin, for example, seek medical attention immediately.

Summer Yard Maintenance Safety

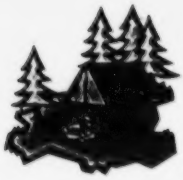
Outdoor property fires are the second largest type of property fire in the summer. Between 1998 and 2002, there were two deaths, 56 injuries, and $731,514 in property losses during the summer months. Vegetation and debris during the dry summer season can ignite and easily burn the landscape around your home. These landscape fires often spread to nearby structures or your home.

Yard Maintenance Safety Tips

- Keep flammable vegetation at least 10 metres away from your home.
- Trim tree limbs so they don't hang over your roof.
- Keep eaves and gutters free of leaves and other debris that burns easily.
- Keep the yard area clear of garbage, debris, dry/dead grass, broken glass, oily rags or dried leaves, and store firewood away from all structures.
- Landscape your property with fire resistive plants. Young, green plants are resistant, as are plants with high moisture content, and low volume shrubs.
- Install spark arrestors on equipment with combustion engines.
- Keep porches and decks enclosed to prevent dry grass and debris build-up.
- Keep storage areas clean and tidy; never allow rags or newspapers to accumulate.
- Clean your chimney and have it inspected by a qualified technician.
- Store flammable gases and liquids outdoors and away from ignition sources. Ensure the containers are certified and labelled by a recognized agency, such as the Canadian Standards Association (CSA), or Underwriter's Laboratories (UL/ULC).
- Have an adequately placed water supply. Pre-connect a garden hose with a nozzle and sprinkler system to access all structural exteriors, including the roof, in case of fire.
- If you must use an extension with your mower, be sure to use only an approved outside cable-type extension. Check the cord frequently to ensure it is not cut or frayed. Replace if necessary.

Burning Vegetation

- Compost or mulch yard debris. If you must burn, check with your local fire department to obtain information about burning regulations and permits.
- Burn trash and debris in a metal container with a sturdy wire-mesh cover.
- Consider the prevailing wind direction and clearance from buildings and vehicles to avoid fire spread to valuable property.
- Clear all flammable and combustible materials within three metres of the burning container. If you are living on a farm, remove all combustible material within at least 30 metres.
- Have fire-fighting equipment at the fire site. Keep a rake, shovel, water and extinguisher nearby and always keep a hose within reach of your fire to put out spot fires.
- Always watch and supervise your fire. Never leave the area. This will allow you to extinguish any spot fires that may occur.
- When you leave, make sure the fire is out.



Camping Safety

Every year, some Albertans suffer serious injury or death from burns while camping. According to a study of burn patients admitted to the University of Alberta's Firefighter's Burn Treatment Centre, in northern Alberta alone, 74 per cent of all camping injuries to children were due to burns. These numbers are even higher in adults. The two major causes of burns were children walking or falling on open flames (34 per cent) and combustibles being poured onto open flame (30 per cent).

Even a small campfire has the potential to spread and become a frightening and unmanageable wildfire. Fuel stoves, heaters, or lanterns in confined spaces can cause carbon monoxide poisoning or explosions when fuel leaks occur. Tents are often destroyed by fire within minutes of an incident.

Campfire Safety Tips

- When selecting a campfire site, attempt to find pre-existing fire facilities, such as fire pits or stoves. Where these facilities are not available, select a site that is clean and away from dry grass, heavy bush, leaves, logs, peat areas, or overhanging branches.
- Keep a ready supply of water near your site in case of an emergency.
- Prepare your site by digging a pit, downwind from your tent, and surround it with rocks to prevent fire spread. Clear the area around your campfire of all debris for at least one metre.
- Keep a ready supply of water near your site in case of an emergency.
- Build your fire gradually, and keep it small for cooking or warmth purposes only. Never use gasoline or liquid fire starters as an explosion can result, and avoid using paper as it can ignite and blow off the fire into the forest. Attend your fire at all times, and be sure it does not spread out of the pit or that sparks are blown away from the fire.
- Stop adding wood to the fire well before you want to extinguish it and allow the fire to burn down. Spread the remains evenly in the fire pit, and slowly stir in water until the ashes are cool. Test the campfire for heat before leaving the site.
- NEVER leave children unattended or playing near a campfire.
- Look for signs that warn of potential fire hazards in provincial and national forests and campgrounds, and always obey park service regulations.

Appliances and Equipment

- Use battery-operated camping equipment whenever possible.
- Ensure liquid-fuelled appliances and fuel containers are certified and labelled by a recognized agency, such as Canadian standards association (CSA) or Underwriter's Laboratories (ULC).
- Follow manufacturer's instructions for connecting and operating your appliance. This will reduce the occurrence of leaks.
- Only use ventilated appliances in your RV, tent, or camper. Appliances such as portable heaters and stoves or lanterns may not be adequately ventilated, and an accumulation of vapours can produce carbon monoxide or violent explosions.

- Always refuel camping appliances outside.
- Always store flammable liquids and gases outside.
- When using appliances fuelled with flammable liquids and gases, keep them away from combustibles, such as tent walls, blankets, paper towels and plates.
- Ensure the flame on appliances is clear blue with occasional yellow tips. A mostly yellow flame is a warning sign of incomplete combustion and possible carbon monoxide presence.
- Have flammable gas and liquid appliances inspected annually. Insects or rodents may damage the appliance when it is not in use.
- Check and maintain all fuel connections and fume vents. Check for leaks by brushing connections with soapy water and looking for bubbles. Have gas appliances checked and serviced at least once a year by a qualified technician.
- Transport flammable fuels in a secured, upright, well-ventilated area.
- When travelling, shut down the fuel to all appliances and equipment by closing the fuel supply.

Tents

- Use tents manufactured of flame resistant fabrics.
- Set your tent up at a safe distance upwind from the campfire.
- Never use matches, candles or open flames in your tent.
- Extinguish your campfire before you go to bed.
- Try to buy a tent with two exits and prepare an escape plan. Be ready to cut your way out of the tent if a fire occurs.
- Keep an extinguisher or container of water available at all times, especially inside the tent at night.

Camping trailers and recreational vehicles

- Ensure flammable fuel appliances in your type of vehicle are approved and certified for use by a recognized testing agency.
- Propane cylinders should be mounted on the roof of the vehicle.
- When filling propane or gas cylinders mounted to a vehicle, turn off the ignition, have all passengers leave the vehicle, and ensure valves are closed after filling.
- Do not cook while the vehicle is in motion.
- Locate your trailer or vehicle at a safe distance upwind from the campfire.
- Extinguish smoking materials before going to bed. Place the ashes in a metal container and soak them with water.
- Avoid accumulating and storing combustibles such as newspapers and grocery bags in your vehicle.
- Develop a fire escape plan and keep a small axe handy for emergency escapes.
- Keep a fire extinguisher handy when cooking, and keep one by the trailer exit door at all times.
- Consider installing a carbon monoxide detector in your vehicle.

Boating

- Before fuelling your boat, extinguish smoking materials and shut off all motors, fans and heating devices.
- Be sure the fuelling nozzle is grounded to the fuel intake and don't fill the tank to capacity – leave room for expansion.
- Wipe up fuel spills immediately and check the bilge for fuel leakage and odour.
- After fuelling and before starting the motor, ventilate with the blower for at least four minutes.
- Only use portable stoves and heaters specifically designed for marine use.
- Keep the bilge free of rags and other combustibles.
- Install a smoke alarm inside your covered boat and test the battery before using the boat each time. Replace the battery at least once a year.
- Have a fire extinguisher on board your vessel.

Vacations

Before you leave the house:

- Turn off or disconnect all electrical appliances.
- Unplug all televisions and radios as lightning or electrical surges can cause fire in this equipment.

When you return home:

- Check to make sure smoke alarms are still functioning.

Prevent Wildland Fires

The risk of wildfires is high during the warm, dry summer months in Alberta. Forest and prairie wildfires spread at an astonishing rate. In Alberta, 40 per cent of all wildfires are caused by human activity, while 60 per cent of Alberta's wildfires are caused by natural phenomena, according to Alberta Sustainable Resource Development. Wildfires often cause loss, damage or injury to residential, industrial, and agricultural areas. Follow these tips to protect your home from potential forest and prairie fires.

Wildland Safety Tips

Site Preparation

- Keep the area within 10 metres of buildings and homes free of flammable vegetation, including shrubs, trees, deadfall or woodpiles. This fuel-free zone provides firefighters with a defensible space to assist in stopping a wildfire's spread.
- Situate firewood, combustible debris, wooden outbuildings and fences at least 10 metres from buildings.
- Vegetation between the 10- and 30-metre defensible zone should include species that are less flammable like aspen, birch, poplar and the Western Larch. Remove or reduce the number of flammable trees such as evergreen, pine and spruce.
- Locate burning barrels at least 15 metres from buildings or flammable material. Barrels should be screened to control sparks and always remain supervised.
- Beyond the 30-metre zone, thin or reduce shrubs and small trees that make up the undercover.
- Contact your utility company to clear vegetation within a tree length of overhead power lines.
- Keep vegetation and combustible material away from propane tanks.
- Keep firefighting tools on hand. A shovel, rake, sprinkler, roof top ladder and a hose that will reach the roof are essential.

Home and business construction

- Use fire-resistant roofing materials such as metal, asphalt, and Underwriter's Laboratories (ULC) treated shakes to provide resistance from fire. Wooden shakes and shingles are ideal fuels for fire.
- Clear your roof and gutters of combustibles, such as overhanging trees, needles and leaves.
- Ensure that exterior walls are made of fire-resistant materials. These include materials such as stucco, brick, metal, and concrete. Wood and vinyl siding provide little protection against fire.
- Keep your home free of fire accumulators. Close in and screen eaves, soffits, decks, and balconies.
- Ensure that your doors and windows are made of fire-resistant materials. Tempered glass provides the best fire protection. However, double or thermal windows will still provide moderate protection.
- Ensure chimneys meet current Alberta Building Code requirements and are screened in with spark arrestors.

If You Are Burned...

- **Cool burn with water** — Immediately pour cool water on burns or soak them for at least three to five minutes (30 - 40 minutes for chemical injury). DO NOT USE ICE. Ice may cause more damage when it sticks to the burn and removes more of the skin. For scalds, immediately remove hot, wet clothing.
- **Stop, Drop and Roll** — If your clothing catches on fire: "STOP, DROP, & ROLL." Flames must be smothered.
- **No ointments or butter** — Use only cool water on burns. Ointments, butter, cream and salves allow the burn to retain heat, may cause infection, and may hinder medical evaluation.
- **Cover the burn** — Apply a soft, clean, dry dressing, bandage or sheet to the burn area. Do not break blisters; this could let germs into the wound. Cover burn victims and keep them warm.

Electrical Injury
DO NOT touch the injured person until the source of power has been disconnected. Primary concerns are airway, breathing, circulation, and cervical spine immobilization. Electricity can cause the heart and breathing to stop. Assess for injuries and begin first aid. Internal injuries may not be evident as electricity can cause severe damage inside the body when it enters and exits.

Chemical Injury
With a cloth, gently brush any dry chemicals off the skin. Remove clothing, and if the chemical has come into contact with the eyes, remove contact lenses if necessary. Then flush all affected areas with water for at least 20 minutes or until pain stops. Be careful not to flush chemical on to other parts of the body. Read container label or consult with Poison Control Center before administering first aid.

When should I see a doctor?
If the burn is larger than the size of a quarter, go to the doctor. Even small burns can endanger infants, young children, and the elderly. The hands, feet, face (especially eyes) and genitalia are critical areas. Electricity, chemicals, and smoke or toxic fumes complicate a burn injury. Certain existing conditions, such as diabetes, and mental and physical impairment, can also cause complications.
(Source: Burn Awareness Coalition, Encino, California and The American Burn Association)